. .

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of

CLARK et al Atty. Ref.: 179-54

Serial No. Unassigned Group: 1627

Filed: December 18, 2001 Examiner: Wessendorf, T.

For: A METHOD FOR MAPPING THE ACTIVE SITES BOUND BY ENZYMES THAT

COVALENTLY MODIFY SUBSTRATE MOLECULES

December 18, 2001

Assistant Commissioner for Patents Washington, DC 20231

Sir:

PRELIMINARY AMENDMENT

Please amend the above-identified application as follows:

IN THE CLAIMS

Please substitute the following amended claims for corresponding claims previously presented. A copy of the amended claims showing current revisions is attached.

8. (Amended) A method of treatment which includes administering to a patient an effective amount of a substrate molecule according to claim 2 or a composition as defined above.

- 11. (Amended) A method according to claim 1 wherein the step (c) of deconvolution is carried out according to the procedure for auto-deconvolution of combinatorial libraries described in WO 97/42216.
- 13. (Amended) A method according to claim 1 wherein said enzyme catalyses covalent modification selected from the group consisting of phosphorylation, acylation; and dephosphorylation.
- 14. (Amended) A method according to claim 1 wherein said enzyme is a protein kinase enzyme.
- 15. (Amended) A method according to claim 1 wherein said modifiable residue Z is selected from the group consisting of tyrosine; serine; threonine; histidine; and aspartic acid.
- 16. (Amended) A protein kinase inhibitor capable of inhibiting the catalytic transfer of the γ -phosphate from ATP to an amino acid residue on a substrate molecule, said inhibitor having been produced by the method of claim 1.

<u>REMARKS</u>

The above amendments have been made to place the application in a more traditional format. Attached hereto is a marked-up version of the changes made to the claims by the current amendment. The attached pages are captioned "Version With Markings To Show Changes Made."

Respectfully submitted,

NIXON & VANDERHYE P.C.

By:

eonard C. Mitchard g. No. 29,009

LCM:Iks

1100 North Glebe Road, 8th Floor

Arlington, VA 22201-4714 Telephone: (703) 816-4000

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS

- 8. (Amended) A method of treatment which includes administering to a patient an effective amount of a substrate molecule according to claim 2 or a composition [according to claim 6] as defined above.
- 11. (Amended) A method according to claim 1 [or 10] wherein the step (c) of deconvolution is carried out according to the procedure for auto-deconvolution of combinatorial libraries described in WO 97/42216.
- 13. (Amended) A method according to [any of claims 1 to 3 and 8 to 12] claim 1 wherein said enzyme catalyses covalent modification selected from the group consisting of phosphorylation, acylation; and dephosphorylation.
- 14. (Amended) A method according to [any of claims 1 to 3 and 8 to 13] claim 1 wherein said enzyme is a protein kinase enzyme.
- 15. (Amended) A method according to [any of claims 1 to 3 and 8 to 14] claim 1 wherein said modifiable residue Z is selected from the group consisting of tyrosine; serine; threonine; histidine; and aspartic acid.

16. (Amended) A protein kinase inhibitor capable of inhibiting the catalytic transfer of the γ -phosphate from ATP to an amino acid residue on a substrate molecule, said inhibitor having been produced by the method of [any of claims 1 to 3 and 8 to 15] <u>claim 1</u>.